

**APPENDIX S**

In the preferred embodiment, two sets of these delay lines are used, one to generate the true value of the internal device clock 73, and the other to generate the complement 74 without adding any inverter delay. The dual circuit allows generation of truly complementary clocks, with extremely small skew. The complement internal device clock is used to clock the 'even' input receivers to sample at time 127, while the true internal device clock is used to clock the 'odd' input receivers to sample at time 125. The true and complement internal device clocks 73 and 74, respectively, are also used to select which data is driven to the output drivers. The gate delay between the internal device clock and output circuits driving the bus is slightly greater than the output circuits driving the bus is slightly greater than the corresponding delay for the input circuits, which means that the new data always will be driven on the bus slightly after the old data has been sampled.